

CLAIMS

1. A method for inspecting any of the properties of a computer, said
computer's configuration, contents of said computer's storage devices, said
5 computer's peripherals, said computer's environment, or remote affiliated
computers, comprising the steps of:

providing at least one inspector which includes an inspector library and
associated methods; and

evaluating subexpressions with said at least one inspector;

10 wherein said inspector performs any of mathematico-logical
calculations, executes computational algorithms, returns the results of system
calls, accesses the contents of storage devices, and queries devices or
remote computers.

15 2. The method of Claim 1, further comprising the step of:

providing an inspector dispatcher associated with an advice client
computer for continually performing relevance determination;

wherein said relevance determination is driven by a database of
relevance clauses which can be continually evaluated; and

20 wherein said inspector library contains executable code which is
invoked by said inspector dispatcher as part of said relevance determination
process.

25 3. The method of Claim 2, wherein an object, property name, and/or
string selector is dispatched to said inspector dispatcher for relevance

evaluation using a method dispatch module in accordance with dispatch information contained within a method dispatch table.

4. The method of Claim 3, wherein said method dispatch module

5 performs the steps of:

parsing a clause in a relevance language;

generating a list of method dispatches in response to said parsing step, wherein specific methods are called in a specific order with specific argument lists; and

10 systematically carrying out a sequence of method dispatches in an appropriate order.

5. The method of Claim 1, further comprising the steps of:

sending certain relevance clauses to a remote location;

15 evaluating said clauses; and

returning said clauses after a user is made aware of what is being transferred; wherein properties of said remote location are learned.

6. The method of Claim 1, wherein said at least one inspector is built into

20 said inspector dispatcher.

7. An inspector for inspecting any of the properties of a computer, said computer's configuration, contents of said computer's storage devices, said computer's peripherals, said computer's environment, or remote affiliated

25 computers, said inspector comprising:

an inspector library containing executable code which is invoked as part of a continual relevance evaluation process; and

one or more inspector methods for performing any of mathematico-logical calculations, executing computational algorithms, returning the results of system calls, accessing the contents of storage devices, and querying devices or remote computers.

5 8. The apparatus of Claim 7, further comprising:

10 an inspector dispatcher associated with an advice client computer for continually performing relevance determination, wherein said relevance determination is driven by a database of relevance clauses which can be continually evaluated;

15 wherein said inspector library contains executable code which is invoked by said inspector dispatcher as part of said relevance determination process.

20 9. The apparatus of Claim 7, wherein certain relevance clauses are sent to a remote location, evaluated, and returned, after a user is made aware of what is being transferred, wherein properties of the remote location can be learned.

25 10. The apparatus of Claim 7, wherein properties which can be learned are an arbitrary combination of elementary properties that are determined according to basic calculations.

25 11. The inspector of Claim 10, said inspector library further comprising any of:

a declaration of a Phrase to be used in a relevance language;
an association of said Phrase to a specific method;
a declaration of a new data type to be used in an evaluation process;
a declaration of a calling prototype of said specific method, including a
5 number and required data types of arguments to be supplied to said specific
method;
a declaration of a result data type of said specific method;
an implementation of said specific method in executable form;
a declaration of special hooks associating code to be called on events,
10 said events including any of inspector dispatcher initialization, inspector
dispatcher termination, beginning of inspector dispatcher main evaluation
loop, and ending of inspector dispatcher main evaluation loop;
a declaration of special hooks associated with creation and
maintenance of special caches associated with said specific method; and
15 an implementation of special event methods and cache methods in
executable form.

12. In a system including computational devices connected by a
communications network, said system comprising a communications
20 apparatus for linking an information provider to information consumer, said
communications apparatus comprising specific units of advice to be shared,
digital documents conveying said advice, an advice provider for broadcasting
said advice in the form of advisories, an advice consumer for receiving said
advisories, wherein advisories are broadcast over said communications
25 network from said advice provider to said advice consumer, a
communications protocol for narrowly-focused targeting of said advisories to

5 said advice consumer by automatically matching advisories with an advice consumer for whom said advisories are relevant, and an inspector dispatcher associated with an advice client computer for continually performing relevance determination, wherein said relevance determination is driven by a database of relevance clauses which can be continually evaluated, at least one inspector, comprising:

an inspector library and associated methods for evaluating subexpressions with said at least one inspector;

10 wherein said inspector library contains executable code which is invoked by said inspector dispatcher as part of said relevance determination process; and

15 wherein said inspector performs any of mathematico-logical calculations, executes computational algorithms, returns the results of system calls, accesses the contents of storage devices, and queries devices or remote computers.

13. The apparatus of Claim 12, further comprising:

one or more caches for avoiding heavy CPU and disk access overhead while successfully performing said continual relevance evaluation.